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2019

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Grünthal , R 2019 , ' Canonical and non-canonical patterns in the adpositional phrase of Western Uralic : constraints of borrowing ' , Journal de la Société Finno-Ougrienne , vol. 97 , pp . 1136 .

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<http://hdl.handle.net/10138/309660>

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## Canonical and non-canonical patterns in the adpositional phrase of Western Uralic: Constraints of borrowing

Notions about adpositions and adpositional phrases (AdpP) reflect the ambiguous nature of this particular domain. While postpositions and prepositions are often dealt with as lexical categories, their syntactic context determines the grammatical relations of individual postpositions. In the diachronic development of individual adpositions, the phrasal unit of AdpP plays a crucial role either enhancing or diminishing the possibility of adopting new adpositions. In Uralic both the head and complement may be inflected, which increases the divergence of the adpositional system in comparison with most neighboring contact languages. This is illustratively seen in the bulk of adpositions in Finnic, Saamic and Mordvinic, which only exceptionally include borrowed lexemes. The focus of this article is bifold. Firstly, it briefly outlines the main structural types of AdpP, particularly in Western Uralic. Secondly, it discusses why loanwords only seldom occur in the adpositional system of languages that are strongly influenced by language contact and widespread bilingualism, such as contemporary Veps and Erzya.

### I. Introduction

Ample morphosyntactic variation is characteristic of the adpositional phrase (AdpP) in the Uralic (U) languages. This divergence is not limited merely to word order alternations, but also includes the inflection of the head and the complement of the AdpP and variations in the case government of adpositions, as well. Constituent order may alternate in Saamic and Finnic, the two northwestern branches of Uralic, which increases the diversity between individual AdpPs also in comparison with neighboring Indo-European contact languages. Languages belonging to these two subgroups have both postpositions and prepositions, although they are predominantly postpositional languages, the prevailing type for all other Uralic languages. This article focuses on Saamic, Finnic, and Mordvinic, collectively labeled as Western Uralic (WU).

Despite a clear areal division into exclusively postpositional languages and those that display a typologically rarer mixed system (cf. Dryer 2013a), a holistic distinction of the Uralic languages into SVO and SOV languages is more complicated. The basic word order of certain western and Central Uralic languages that are spoken in the contact zone of various Indo-European languages is difficult to ascertain, because it is often affected by topicality that triggers alternation between SVO and SOV word order (Vilkuna 1998), whereas the predominance of postpositional phrases (PostP) implies a more unambiguously SOV order, the dominant word order in terms of classical word order typology (Dryer 1992: 92–93, 2007: 81–89, 2013a, Grünthal 2003: 45–52, Hågège 2010: 109–128). The strong correlation between basic word order and the constituent order of adpositional phrases, as suggested by Joseph Greenberg (Greenberg 1963; cf. Dryer 1992: 92–93), generally holds true for the Uralic languages, which

typically display SOV word order and postpositions. Most Saamic and all Finnic languages, however, violate this principle by applying predominantly SVO word order and postpositions, although they do have a more limited number of prepositions as well. This combination is not as frequent in world's languages (Dryer 2013a).

The divergence in the basic word order and mixed adpositional system in Western Uralic raises the question whether language contact is involved in this change, because it has taken place in those languages that have been most strongly influenced by Indo-European languages. Over the course of several millennia, there have been long-term contacts between the Uralic and Indo-European languages. Different Indo-European languages, most notably Germanic and Baltic, have considerably influenced early Saamic and Finnic languages at a proto-language stage (Koivulehto 1999, Carpelan & al. 2002, Grünthal & Kallio 2012) as well as later on, over the course of the history of individual languages. In present-day Uralic-speaking communities in Russia, bilingualism is very widespread and the language of individual speakers in numerous speech communities often exhibits strong interference from Russian (Gavrilova 2013, Janurik 2013, Puura & al. 2013: 33–52, Sarhimaa 1999).

However, the influence of language contacts on the adpositional system of the Western Uralic languages is only marginal. There is very little evidence for borrowed adpositions or contact-induced changes in adpositional phrases, even in the most intensive contact situations such as Latvian influence on Livonian (Grünthal 2003: 177–196) and Russian on Veps. One of the main reasons for this phenomenon is the predominance of PostPs in Uralic languages, which contrasts with the preference for prepositional phrases (PreP) in the Germanic, Baltic, and Slavic languages. It is also more likely that the emergence of PrePs in Western Uralic is caused by several diachronic changes and a gradual typological restructuring instead of contact-induced change (Grünthal 2005).

This partly contradicts the statement that in a language contact situation anything can be borrowed, although there are different hierarchies of and constraints on borrowing (Aikhenvald 2006, Curnow 2001, Harris & Campbell 1995: 119–141, Matras 1998: 283–285, Moravcsik 1978, Thomason & Kaufman 1988: 11–34). However, the borrowing of prepositions has been reported from many other language areas. Consequently, the category of adpositions itself does not prevent borrowing but, presumably, there are other language-specific constraints. There are also different paths of adopting borrowed adpositions, most notably the grammatical change of adverbs and nouns to adpositions.

We maintain that the morphosyntactic variation, morphological rules and inflectional patterns that are involved in Western Uralic AdPs are the main reasons why there is hardly any evidence of contact-induced change in the AdPs of individual languages. Considering the structural diversity of AdPs in individual Finnic languages, for instance, the main differences result from language-specific syntactic changes determined by the grammar of individual languages. Given the implicational relationship between basic word order and AdP, word order change in Western Uralic is, in principle, one of the main preconditions for the emergence of prepositions. However, as noted above, word order is also not the sole causal factor in explaining variation in

Western Uralic AdpPs. Those morphosyntactic constraints that prevent an extensive influx of borrowed adpositions, even in a very intense language contact situation, influence both the lexicon and grammar of local minority languages such as Livonian and Veps (both Finnic).

Our main research questions are the following:

- (1) What is the default structure of AdpP in Uralic and what kind of variation is found in Western Uralic?
- (2) What kind of diachronic changes occur in the canonical pattern of AdpP in Western Uralic?
- (3) Do language contacts influence the category of adpositions?
- (4) How should the influence of language contacts be assessed in terms of bilingualism and lexical borrowing?

This article accounts for the diversity that is observed in Western Uralic adpositional phrases in terms of diachronic language change including both syntactic restructuring and contact-induced change. The data include examples drawn from languages belonging to these subgroups and cases that illustrate both the internal variation within Western Uralic and language contact between individual Western Uralic and Indo-European languages, such as Russian influence on present-day Veps and Erzya (Mordvinic). Examples drawn from the spoken language will be preferred to those from standard literary languages, as standard languages often suppress non-standard expressions such as transparent borrowings and other deviations considered as colloquial.

Methodologically, we will examine the chosen topic from a typological angle with a focus on structural variation. The more limited scope is targeted towards pointing out morphosyntactically motivated explanations of the diachronic development of AdpP in the light of language contacts. Special attention will be paid on areally selected Western Uralic languages.

## 2. Canonical and non-canonical patterns in the Uralic adpositional phrase

This section details the diversity of the AdpP in the Uralic languages. We assume that historically the canonical AdpP of Proto-Uralic was syntactically similar to a genitive phrase, and the complement in the genitive preceded the head (cf. Bybee 1988: 353–354). Accordingly, the syntactic head was a relational noun or a grammaticalized postposition. In the following analysis, the patterns consisting of a noun complement in the nominative or genitive and a postposition are labeled as canonical, while a PostP, which has a complement in some other case, and word order deviations are called non-canonical.

There are six main morphosyntactic patterns that are generally encountered in Uralic adpositional phrases, and many more that occur in individual languages. In addition to nominative and genitive case-marking, the complement of a postposition

may also occur in, e.g., a local case, which increases the number of available combinations. However, the main alternations involve variation in the word order of the adpositional phrase and the case of the noun complement that most typically displays one of the grammatical cases. The nominative and the genitive are wide-spread in the Uralic languages, although some languages also display the dative and partitive, historically a local case that used to have an ablative function. The following generalizations outline the typology of Uralic AdpPs:

- (i) All Uralic languages have postpositions and corresponding relational nouns.
- (ii) Only Saamic and Finnic languages display prepositions. However, they are considerably less common than postpositions.
- (iii) Postpositions commonly display local cases, more often than prepositions do.
- (iv) In Saamic and Finnic, certain adpositions are ambipositional and may occur both at a pre- and post-nominal position.
- (v) The complement of the adposition is most commonly either in the nominative or genitive. In the Finnic languages and in certain PostP types in Mordvinic the complement may occur in the partitive (ablative). Many Uralic languages occasionally display a complement in one of the local cases or the dative.

The morphosyntactic variation characterizing Uralic adpositional phrases is summarized in Table 1. There are seven main branches of Uralic, of which the Finnic languages are statistically overrepresented because they display considerably more alternations than other Uralic languages. The symbol + shows that the given pattern occurs in the language, whereas – indicates the absence of that pattern. The symbol ± indicates that the occurrence of the pattern is ambiguous and depends on the way inflectional changes and certain morphosyntactic structures are encoded.

	SaaN	Liv	Est	Fin	Vep	Mrd	Mar	Udm	Mns	Hun	Nen
I [N+[GEN]] + [Postp[+CX]]	+	±	+	+	+	+	+	–	–	–	+
II [N+Ø[NOM]] + [Postp[+CX]]	–	±	–	–	–	+	+	+	+	+	–
III [N+[+PTV]] + [Postp[+CX]]	–	+	+	+	+	±	–	–	–	–	–
IV [Prep[+CX]] + [N[+GEN]]	+	±	+	+	–	–	–	–	–	–	–
V [Prep[+CX]] + [N[+PTV]]	–	+	+	+	+	–	–	–	–	–	–
VI [Prep[+CX]] + [N+Ø[NOM]]	–	±	–	–	–	–	–	–	–	–	–

Table 1. The morphosyntactic structure and six major patterns of the adpositional phrase in the Uralic languages (SaaN = North Saami, Liv = Livonian, Est = Estonian, Fin = Finnish, Vep = Veps, Mrd = Mordvinic, Mar = Mari, Udm = Udmurt, Mns = Mansi, Hun = Hungarian, Nen = Nenets).

The two basic patterns characterizing the AdpP in Uralic are presented in the upper rows (I–II) and are considered to be canonical for two reasons. Firstly, they are wide-spread in the Uralic languages and represent the oldest reconstructible types. Secondly, they are typologically much more common than (III–V) whereas (VI) is mainly attested in typologically and genetically distinct non-Uralic languages (Grünthal, forthcoming). The complement of a postpositional phrase (PostP) is marked by either the genitive or the nominative case. The nominative pattern occurs in Permic languages, such as Udmurt, and in Ugric languages, such as Mansi and Hungarian, which possibly have lost the Proto-Uralic genitive or display only a secondary one (Permic). Mari utilizes the genitive if the postposition is a personal pronoun, while otherwise the complement is in the nominative in Mari, too. Postpositions are typically inflected in local cases. Given that they are inherently an open class manifesting diverse morphological and syntactic strategies in diverse grammatical systems (cf. Hagège 2010: 8–105), content words, most notably body-part nouns, may be used grammatically in a postnominal position and function in Uralic.

We will label as ‘non-canonical adpositional phrases’ all other AdpP types (III–IV), including PostPs that have the noun complement in any other case or PrePs that have a deviating word order of the two constituents.

The empirical analysis of the typology of the AdpP in Uralic and the discussion of the role of language contact in the development of the adpositional systems is organized as follows. In Section 3, the canonical AdpP in Uralic is briefly introduced. Deviations from the canonical pattern are discussed in Section 4. Section 5 addresses language contact situations that have or could have influenced the AdpP in Western Uralic. The methods of and constraints on borrowing adpositions from Indo-European contact languages into Uralic are discussed in more detail in this section.

### 3. The Canonical AdpP in Uralic

In many of the world’s languages, the constituent order and syntactic structure of the canonical postpositional phrase having a genitive complement are structurally similar to those of genitive phrases that expresses possession (Greenberg 1963: 99, Bybee 1988: 353–354, Dryer 2013a, 2013b). As indicated in Table 1 above, this pattern is widely attested in the Uralic languages, as well. Historically, this pattern must be considered as the original one, in comparison to a PostP with a nominative complement, assuming that the original genitive ending *\*-n* was lost in languages that do not have it. Regardless of the case of the complement, a postposition may display a case suffix as well, most commonly a local case (1–11 below). The inflection of a given postposition depends mainly on its semantical domain and the productivity of local cases in a language. Most Uralic languages display many local cases that are used in both relational nouns and fully grammaticalized postpositions (see below, Examples 5 and 25–28). Moreover, postpositions often preserve unproductive inflectional suffixes, such as petrified local case endings, much as adverbs do. In Examples (1–4), the postposition does not have any productive case ending.

## Canonical I

[N+[GEN]] + [Postp]

## Inari Saami

- (1) ...*te*      *biejj-ii*      *to-ho...*      *to-n...*      ***to-j***      ***muora-j***  
 then      put-PST.3PL      there-LAT      it-GEN.SG      it-GEN.PL      tree-GEN.PL  
  
***vuála***      *já*      *muora-jd*      *piejj-ii*      *oola*  
 under.LAT      and      wood-ACC.PL      put-PST.3PL      upon.LAT

‘They put [it] there under the trees and they put wood upon it.’ (MSFOu 213: 25)

- (2) *mij*      *jurde-p*      *æt*      *tot*      *lujst-ää*      *đobbee-n,*      *lujstim-ij-gyejm*  
 we      think-3PL      that      it      skate-3SG      there-LOC      skate-PL-COM  
  
***jiega***      ***mielđ***      *já*      *SÄHKÖLAMPPU*      *đa-st*      *lii*      *kieda-st.*  
 ice.GEN      along      and      electric.lamp      it-LOC      is      hand-LOC

‘We think that (s)he is skating there and has an electric lamp in his/her hand.’ (MSFOu 213: 59)

## North Saami

- (3) *ođasmahtto-juvvon*      *diedu-t*      *sámi*  
 transmit-PASS.PTCP      information-PL      Saami  
  
***servodatdilálašvuoda-id***      ***birra***      *lea*      *váilevaš*  
 society.state-GEN.PL      around      is      inadequate

‘The transmitted information about the societal activities of the Saami is inadequate.’

## Votic

- (4) *a*      *vot*      *sis*      *se*      *pan-tii*      ***lavvaa***      ***tagaa***  
 but      so      then      it      put-PASS.PST      table.GEN      behind.LAT  
  
*da*      *annõ-ttii*      *süvv-ä*  
 and      give-PASS.PST      eat-INF

‘So (s)he was put at the table and given food.’ (MSFOu 63: 10)

Like ordinary nouns in most Uralic languages, postpositions may display possessive suffixes. If there is no possessive suffix, the complement is obligatory even if the postposition is inflected, as in (5–6). However, if the complement is a pronoun that has person reference, it may be omitted, as in (7), in which the endocentric postposition *vaks-so-nzo* beside-INE-3SG ‘beside her/him’ marks both the referential person expression and a type of location.

[N+[GEN]] + [Postp + CX [+ PX]]

Votic

- (5) *isu-b*      *senee*      *mäjee*      *pää-l*      *suur*      *inehmin*,  
 sit-3SG      it.GEN      hill.GEN      on-ADE      big      man  
*si-tä*      *kuttsua-s*      *vilikana*  
 it-PTV      call-PASS      giant

‘There is a big man sitting on the hill, and he is called a giant.’ (MSFOu 63: 48–49)

Erzya

- (6) *Tu-s’*      *kudo-v,*      *mol’-s’*      *ferma-v*      *dy*  
 leave-PST.3SG      home-LAT      go-PST.3SG      farm-LAT      and  
*ava-nzo*      *tarka-s*      *karma-s’*      *skalo-n’*      *pot’a-vto-mo.*  
 mother-3SG.GEN      place-LAT      begin-PST.3SG      cow-GEN      milk-CAUS-INF

‘(S)he left to go back to home, went to the farm, and began to milk cows instead of his/her mother.’ (VV 14)

- (7) *Ejkakšo-s’*      *udo-s’*      *vaks-so-nzo,*      *ozamo*  
 child-DEF      sleep-PST.3SG      beside-LOC-3SG.GEN      sit-INF  
*tarka-n’-t’*      *lang-so.*  
 place-GEN-DEF      upon-LOC

‘The child slept beside her/him on the chair.’ (VV 14)

The second canonical pattern is characterized by a nominative complement. Note that the postpositions as syntactic heads do not diverge between the canonical types (I–II). Thus, postpositions are also very frequently marked by local cases in Mari, the Permic languages, and the Ugric languages (Examples 8–11), and they may show personal reference by means of possessive suffixes, as in Erzya in (7) above. The nominative complement is the most frequent form in the Central Uralic languages – Mari and Permic, the Ugric languages, and partly in Mordvinic.

Canonical II

[N+[Ø]] + [Postp[+CX]]

Erzya

- (8) *Ul’ema,*      *s’e*      *t’ejt’er’e-nt’*      *ojme-ze*      *a*      *pek*      *paro,*  
 obviously      it      girl-GEN.DEF      spirit-3SG      not      very      good  
*pr’eve-nze-jak*      *puva-vi-t’*      *varma*      *mel’-ga.*  
 sense-3SG-ENCL      blow-REFL-3PL      wind      after-PROL

‘Obviously the spirit of that girl is not very good, even her sense is blown in the wind.’ (VV 15)



Mari

- (9) *Ječy-m*      *yšt-en*      *luk-šo*      *kombinat*  
 ski-ACC      do-PTCP.PST      convey-PTCP      company  
*Jul*      *sere-š*      *verlan-en.*  
 Volga      side-LAT      locate-PTCP.PST

‘The company that used to make skis was located on the shore of the Volga River.’ (Ushakova 2004: 4)

Udmurt

- (10) *Kat’a*      *dory-s’*      *košk-i-z*      *Maks’im.*  
 Kat’a      at-ELA      leave-PST-3SG      Maksim  
 ‘Maksim left from Kat’a(’s place).’ (UT 61)

Mansi

- (11) *porygpan-ēkwa*      *ta*      *tūr*      *wāta-t*      *in*      *ōli*  
 frog-woman      it      lake      shore-LOC      still      is  
 ‘the frog is still on the lake shore’ (Kálmán 1976: 73)

#### 4. Divergence from the canonical pattern

Two major changes caused a split in the canonical pattern in Western Uralic. Firstly, the complement of the postposition may often occur in the partitive, which is characteristic of the Finnic languages but has a parallel in Mordvinic, whereas the partitive has completely lost its status as an independent category in Saamic. The grammars of Mordvinic traditionally label the case as the ablative or separative instead of as the partitive, although there are significant functional similarities. In the Saamic languages, the merger between the plural genitive and partitive has eliminated the functional distinction between these two cases, although the historical distinction may still be reconstructed (Korhonen 1981: 213–216, Sammallahti 1998: 68, Szabó 1984). As noted, postpositions may govern cases other than the genitive and nominative even in other Uralic languages, but the development of the partitive as a second dominant case of the complement of an adposition in Finnic is a part of a more thorough typological change. Secondly, a change in the basic word order has triggered the emergence of prepositions and the ambipositional use of postpositions. In Mari (9) and Mansi (11), for instance, the predicate regularly occurs in the sentence-final position which is typical of SOV languages whereas the Saamic and Finnic languages (1–5) display an SVO word order. The distinction between prepositions and postpositions in Finnic is manifested in two ways, either as lexical differences between prepositions and postpositions or as a word order alternation between PreP and PostP. More broadly speaking, it is an indication of a typological splitting into morphosyntactically and semantically distinctive distinguishable PostPs and PrePs.

The main morphosyntactic type of the Finnic PreP originates historically from a comparative clause consisting of a complement in the partitive (historically ablative) case and a head without any productive case suffix (Grünthal 2005). This pattern is attested in the PostPs of the Finnic and Mordvinic languages (12–13).

#### Non-canonical I

[N[+PTV]] + [Postp[+CX]]

##### Votic

- (12) *pääs-i*                      *nä-i-lt*                      *čäz-i-ss*                      *vällää,*  
 escape-PST.3SG                      they-PL-ABL                      hand-PL-ELA                      out.ILL  
  
*johs-i*                      *orku-a*                      *müö*  
 run-PST.3SG                      valley-PTV                      along

‘(S)he escaped from their hands and ran along the valley.’ (MSFOu 63: 74)

##### Erzya

- (13) *Kemen-ce*                      *klasso-nt’*                      *pr’ado-ma-do*                      *mejle*                      *kolmo-n’e-st...*  
 ten-ORD                      class-GEN.DEF                      end-INF-ABL                      after                      three-ADV-3PL...  
  
*snartn’e-st’*                      *tonavtn’e-me*                      *universit’et-se.*  
 try-PST.3PL                      study-INF                      university-LOC

‘After finishing the tenth year, all three attempted to study at the university.’ (VV 24)

The word order change occurs in the canonical AdpP and also in the non-canonical AdpP that has a different pattern of case government. Saamic (14), in turn, undergoes a simple word order change in the AdpP that triggered the emergence of prepositions as in *čooda suolluu* ‘through the island’ instead of \**suolluu čooda*. The order of the constituents of a PreP is opposite to the expected one. The genitive complement and its optional determiners are located after the head, which is a preposition in the examples provided, and is attested in Finnic (15), as well.

#### Non-canonical II

[Prep[+CX]] + [N[+GEN]]

##### Inari Saami

- (14) *tæggær*                      *kedgikuodáš*                      *mii*                      *moona-j*                      *to-ho,*  
 such                      stone.hollow                      what                      go-PST.3SG                      there-ILL  
  
*čooda*                      *to-n*                      *suolluu*  
 through                      it-GEN                      island.GEN

‘[There was] such a stone hollow that went there, through the island.’ (MSFOu 213: 24–25)

## Finnish

- (15) *Sodankylä-n elokuvajuhl-i-lla bilee-t*  
 Sodankylä-GEN film.festival-PL-ADE party-PL  
*jatku-i-vat läpi yö-n.*  
 continue-PST-3PL through night-GEN

‘The party continued through the night at Sodankylä film festival.’

The morphosyntactic changes in the AdpP in Western Uralic, including the change of the constituent order and case of the complement of AdpP, have given birth to a secondary type of AdpP in the Finnic languages. The canonical PostP that displays a genitive complement is still preserved, and is actually the most common type of AdpP in all Saamic and Finnic languages. It is contrasted with the PreP, in which the head precedes a partitive complement (Examples 16–18). Functions denoting ‘path’ as in (14–15 and 18) and temporal comparison as in (16–17) are characteristic of PrePs in both Saamic and Finnic.

## Non-canonical III

[Prep[+CX]] + [N[+PTV]]

## Votic

- (16) *minuu isä kool-i ee-zä minuu süntümä-ä,*  
 my father die-PST.3SG before-INE I.GEN birth-PTV  
*kahs kuu-ta*  
 two month-PTV

‘My father died two months before I was born.’ (MSFOu 63: 40)

## Veps

- (17) *ak se i kol’ i eduu kolenda-d*  
 woman it and die.PST.3SG and before death-PTV  
*sanu-i uko-le...*  
 say-PST.3SG man-ALL

‘So, the woman died and said to the man before her death...’ (MSFOu 100: 258)

## Livonian

- (18) *ta tuļ pits trep-ī-di ildz*  
 (s)he come.PST.3SG along stair-PL-PTV up  
 ‘(S)he came up along the stairs.’ (MSFOu 106: 115)

Although several changes have taken place in the Western Uralic AdpPs, there is no transparent indication that language contacts have been directly involved. Adpositions

as lexical units, for instance, do not belong to the extensive mass of borrowed vocabulary representing different historical layers. In the Saamic languages, the PreP originates from a word order change in the AdpP, as the complement may follow the head as in (14). The same change also occurs in Finnic as shown in (15), where a PreP may have a genitive complement just as a PostP would. In the Saamic languages, the case system was affected by the loss of the genitive and accusative suffix and the functional merger of the genitive-accusative and partitive in the plural (Korhonen 1981: 212–216, Sammallahti 1998: 65–71). Thus, the change in AdpP primarily consists of the erosion of the inflectional elements, such as case suffixes, and the change of the constituent order.

In the Finnic languages, the PreP has a parallel in comparative constructions, in which ablative cases are typically used (Grünthal 2005). The partitive is historically an ablative case, which still shares some of its original functions, for example, its use in comparative constructions. This parallel suggests that the translation of (16) ‘before I was born’ is a paraphrasing of ‘earlier than I was born’ and ‘before her death’ in (17) is comparable with ‘earlier than her death’. The structural divergence of AdpPs in Finnic was increased by the loss of the genitive suffix in Votic, Estonian, and Livonian, which increased the importance of flexive forms, as it did in Saamic.

The main mechanisms of change in the AdpP of Western Uralic are summarized in Table 2. The changes can be divided into morphological and syntactic changes. These changes are mutually intertwining parts of the typological change.

#### Morphological change

- (i) attrition and eventual loss of the case suffix of the complement (very frequent) (Examples 1–5, 14)
- (ii) change in the case form of the complement (not very frequent; in Finnic some variation between the genitive and partitive is attested)
- (iii) adaptation of the inflection of the complement into the canonical morphosyntactic pattern of the AdpP (not very frequent, occurs in those U languages in which the N of the AdpP is inflected)
- (iv) attrition and loss of the case suffix of the adposition (very frequent) (1, 4, 5, 17)
- (v) suffixing of postpositions (very frequent) (Baker 1985: 172–201, Korhonen 1981: 224–226, Sammallahti 1998: 69–70, Oinas 1961, Tikka 1992)
- (vi) morphological adaptation of postpositions to productive inflectional categories (frequent)

#### Syntactic change

- (vii) change in basic word order
- (viii) change in the constituent order of the AdpP

Table 2. The mechanisms of change of the Western Uralic adpositional phrase.

Historically, the canonical pattern in which the complement always preceded the head (PostP) was the starting point from which the canonical Uralic morphosyntactic structure began diverging. If the reference of a spatial adposition, for instance, is indicated with a personal pronoun, the complement can be completely omitted and replaced by a possessive suffix, as in (7) above. The non-canonical pattern comprising a PreP is different, because prepositions never take possessive suffixes in Western Uralic which makes the marking of the complement and presence of pronouns obligatory in PrePs.

From the viewpoint of diverging word order, both the standard canonical AdpP (PostP) in Uralic and the standard non-canonical AdpP (PreP) characteristic of the Finnic languages include a great deal of variation, as shown above. These two patterns illustrate the typological change that has taken place in Western Uralic (Table 3). One of the main differences is that postpositions often are relational nouns, such as a body part nouns, whereas prepositions are not. However, as postpositions, relational nouns do not take number suffixes, only case suffixes.<sup>1</sup>

<b>Canonical</b> (standard)	
Complement	Head
N((+ DU/PL) + CX (+ PX)) +	Postp (+ CX (+ PX))

<b>Non-Canonical</b> (standard)	
Head	Complement
Prep + (CX) +	N (+ DU/PL) + CX (+ PX)

*Table 3.* The morphosyntactic pattern of the standard canonical AdpP (PostP) in U and the standard non-canonical (PreP) in Saamic and Finnic (WU).

## 5. Language contact and the adpositional phrase in Western Uralic

There is ample evidence of long-term Indo-European influence on the Western Uralic languages, most notably in lexical borrowings from the Germanic, Baltic, and Slavic languages. At certain prehistoric bottleneck stages, language contact triggered major changes in phonological systems and lexicon, which have some significant implications historically with respect to assumed cultural and socioeconomic changes, for example the spread of agriculture and the rise of population size.

1. The dual is attested in the Saamic, Ob-Ugric, and Samoyedic languages, while other Uralic languages display only singular and plural.

Contrary to contact-induced phonological changes, which often follow clear substitution rules, there is no model that unambiguously explains functional and syntactic borrowing. As regards adpositions, there is no direct indication of the influence of language contacts in the Western Uralic adpositional system even in languages that, generally speaking, have been very heavily influenced by other languages. Presumably, typological differences with neighboring languages are a primary reason for this with borrowing more commonly occurring at a lexical level.

In this section, we shall investigate the constraints on adposition borrowing in Western Uralic. We shall first proceed with the identification of cases in which borrowed elements are clearly involved in AdpPs.

If contact-induced influence were to be attested in the adposition system of Western Uralic, it would most likely come from those neighboring Indo-European languages that have influenced the vocabulary and in many cases the phonology of several Western Uralic languages. There are numerous individual contact situations. More precisely, there are different contacts between Germanic and Western Uralic (Hofstra 1985, Kallio 2012, Koivulehto 1999, LÄGLOS), such as German influence on Estonian (Hasselblatt 1990, Hinderling 1981, Raag 1987) and late Scandinavian influence on Western Saamic (Aikio 2006) and Finnish (Grönholm 1988). Contacts with early Baltic variants have taken place at the proto-language level (Thomsen 1890, Junttila 2012), while Latvian has especially influenced Livonian and also those Estonian variants that were once spoken in Latvia (Suhonen 1973, Vaba 1997). Slavic influence includes the intensive Russian influence on numerous Uralic languages (Blokland 2009, Must 2000). There is much less evidence for Turkic influence on Mordvinic than on Mari and Udmurt in the Middle Volga region. Mutual contacts between closely related geographically adjacent languages, such as contacts within Saamic or Finnic, often do not leave any transparent traces.

Nevertheless, some assumptions are found in literature. Saarinen (2005: 169) claims that there are, in fact, 11 postpositions in the Mordvinic languages etymologically borrowed from other languages. These became postpositions only secondarily. In another article, Saarinen (2007: 89) argues that the number of postpositions in Mari has increased due to foreign influence (cf. also Saarinen 2003). Yet, her main conclusion is that both in Mordvinic and Mari language-internal changes and grammaticalization are the primary means for enhancing the properties of secondary postpositions.

The three most typical contexts in which borrowed adpositions or AdpP's occur in Western Uralic are the following: (1) code-switching, (2) borrowed nouns, and (3) borrowed adverbs that are used as adpositions.

### 5.1. The role of code-switching in framing the AdpP

In synchronic conversational data and published text collections based on spoken language, code-switching is characteristic of numerous multilingual Uralic minority language communities. The contemporary mobility of individual people has multiplied the contacts between speakers of Uralic languages with other languages, such as

Indo-European, most notably Russian. Most Uralic languages are spoken or were once spoken in areas where Russian has been the language of political power and, more recently during 20th century, also the language of education and the most important economic networks. In contemporary data, intensive lexical borrowing from Russian and code-switching with Russian are ubiquitous.

Although there are considerable typological differences between individual U languages, the difference between the AdpP of Russian and that of U languages is even more significant. The inflection of the constituents of the AdpP, language-specific morphological rules, and case government outline the divergence of AdpPs even under very strong foreign interference. We assume that in a typical language contact situation between U and IE languages the borrowing of adpositions takes place by means of code-switching and embedding the AdpP as a framed syntactic pattern, following the terminology of Myers-Scotton (Myers-Scotton 1992, Sarhimaa 1999: 137–141). This is illustrated in (19–23) drawn from Votic, Veps, and Erzya; examples (21–23) originating from fieldwork in 2013, all under a strong Russian influence.

#### Votic

- (19) *nai-maa*                      *ep*                      *saa*                      *nõis-a,*                      *potomuušto*                      *miä*  
 marry-INF.ILL                      NEG                      get.CNG                      begin-INF                      because                      I  
*V*                      **SAM-OM**                      **DEL-E**                      *õtsi-n*                      *tüö-tä*  
 [in                      same-INS                      thing.N.PREPL]                      search-1SG                      work-PTV

‘I should not marry, because actually I’m looking for a job.’ (MSFOu 63: 44)

#### Veps

- (20) *služ-ii-n*                      *viiz’*                      *vo-t*                      **S**                      **POLOVIN-OI,**  
 serve-PST-1SG                      five                      year-PTV                      [with                      half-INS]  
*meide-n*                      *vode-n*                      *oigend-ii-ba*                      *ipon-skeja-le*                      *voina-le*  
 we-GEN                      year-GEN                      send-PST-3PL                      Japan-ADJ-ALL                      war-ALL

‘I served in the army for five and a half years. They sent the soldiers of our year to the Japanese war.’ (MSFOu 70: 35)

#### Erzya

- (21) *jars’a-t’ano*                      **ZA**                      **STOLOM**  
 eat-1PL                      [behind                      table-INS]

‘We eat behind the table.’ (Fieldwork 2013)

- (22) **PERED**                      **VOIN-OI**                      *t’e-zen*                      *mama*                      *us’k-i-z’e*  
 [before                      war-INS]                      this-LAT                      mother                      send-PST-3SG/3SG

‘(S)he sent mother here before the war.’ (Fieldwork 2013)

(23)

– <i>mez'e t'ej-i?</i>	what do-3SG	'What is (s)he doing?'
– <i>ard-i</i>	drive-3SG	'(S)he is driving.'
– <i>ko-v?</i>	where-LAT	'Where (to)?'
– <b>PO SAMOL'OTKA</b>	on airplane	'by airplane' (Fieldwork 2013)

In Examples (19–22), the Russian prepositional phrases are embedded in sentences in several Western Uralic languages. The same pattern occurs for spatial (*v samom dele, za stolom*), instrumental (*s polovinoi, po samol'otka*), and temporal (*pered voinoi*) functions. Example (23) shows that code-switching and the adoption of a foreign AdpP may take place in a reply to another speaker in the discourse. In all cases, the frame of the borrowed AdpP remains clear and corresponds to what Muysken (2007: 320), for instance, labels 'insertion'.

The characteristic of AdpPs as syntactic units is seen in their regular framing in bilingual speech. In (24), there are four Russian AdpPs that are embedded in Veps speech with sentences in which the AdpP is a subordinate of the Veps verbs *oli* and *openziba* and the Russian verb *zavodiba* that is inflectionally integrated into Veps morphology.

Veps

(24) <i>Ol-i</i>	<i>škola-s</i>	<i>nece</i>	<i>pervija-n</i>	<b>PO-VEPSSKI</b> ,	
be-PST.3SG	school-INE	this	first-ESS	[on-Veps]	
<b>DO</b>	<b>NOV-OGO</b>	<b>GOD-A</b>	<b>PO-VEPSSKI</b>	<i>openz-i-ba</i>	<i>a</i>
[until	new-GEN	year-GEN]	[on-Veps]	teach-PST-3PL	but
<i>sid</i>	<b>POSLE</b>	<b>NOV-OGO</b>	<i>zavod-i-ba</i>	<b>PO-RUSSKI</b>	<i>ope-ta.</i>
then	[after	new-GEN]	begin-PST-3PL	[on-Russian]	teach-INF

'At first we had Veps at school, until the New Year they taught in Veps but then after the New [Year] they began to teach in Russian.' (Fieldwork 2006)

## 5.2. Adapted borrowings

If there are adpositions in Western Uralic that are loanwords, there are two main ways in which they were borrowed. These adpositions descend either from nouns or adverbs that at a second stage had been used as adpositions. Adapted borrowings such as nouns and adverbs diverge from borrowings that correspond one-to-one to the source language because they have become adpositions only via semantic and syntactic reanalysis and secondary grammaticalization. Given that adpositions, in principle, generally are an open class into which new members are constantly adopted, the ongoing evolution of grammar actually implies that different word classes are involved in the semantic space giving rise to new adpositions. The point is that those



parts of speech that belong to the grammaticalization chain of adpositions are borrowed as words in a language contact situation, not as phrasal units.

Nevertheless, despite the dynamic character of the adpositional system, there are not so many borrowed nouns that are used as relational nouns determining grammatical relations. The most typical category is composed of body part nouns denoting basic anthropomorphic units such as ‘hand’, ‘head’, ‘side’, ‘breast’, ‘ear’ that all occur in grammatical phrases in the Finnic languages and, more generally speaking, are typologically very common (Hagège 2010: 162–164, Hilpert 2007, 2010). In Western Uralic, the sole relational noun of Russian origin is Russian *бок* ‘side’ used in both Veps (25–26) and Erzya (27–28). In both languages, it displays spatial functions and is inflected in local cases just as any other noun. In Veps, *bok* ‘id.’ is inflected in the so-called internal local cases, such as the inessive *bok-ha* side-ILL ‘to the side of’ and external ones, cf. allative *boka-le* side-ALL ‘on(to) the side of’. In the Erzya examples, the word is inflected in the elative and inessive, but it displays other cases as well.

Veps

- (25) *a mei siga-upäi joks-ta ken kuna*  
 but we there-ABL run-INF who where  
*voi-b kamanda-ta iče-moi bok-ha*  
 can-3SG command-ABE our-1PL side-ILL

‘But we began to run away from there everywhere to our own side without a command.’ (MSFOu 70: 36)

- (26) *nece-n ku sato-n boka-le lükäädä-b,*  
 this-GEN when pile-GEN side-ALL push-3SG  
*ka sigaa mamš*  
 so there mother

‘If you push this pile down, mother will be there.’ (Kettunen 1925: 134)

Erzya

- (27) *n’ej alaša-s’ s’ime-v-s’ i tu-s’*  
 now horse-DEF drink-PASS-3SG.PST and leave-SG.PST  
*alaša-st’ boka-sto*  
 horse-GEN.DEF side-ELA

‘Now the horse drank and [(s)he] left from beside the horse.’ (Fieldwork 2013)

- (28) *alaša-s’ lis’ma boka-so, ved’ mel’ga*  
 horse-DEF well side-INE water after  
*sa-s’ s’ime-me*  
 come-3SG.PST drink-INF

‘The horse is beside the well, it came to drink to get water.’ (Fieldwork 2013)

Given that there is little evidence on the direct adoption of foreign adpositions and AdpPs as such, the influence of language contacts on the adposition system in Western Uralic is more complicated. In addition to the code-switching discussed above, semantic extension is possible. Paul Ariste (1975), for instance, suggests that the use of two Votic postpositions *möö* 'along; until' and *pääle* (up)on-ALL : *päällä* (up)on-ADE : *päältä* (up)on-ABL '(up)on', both widely known in other Finnic languages, functionally correspond to the Russian prepositions *po* and *na*. He proposes that the similarities and extension of functional properties of these Votic postposition sets took place under Russian influence. This kind of influence is indirect. The next section examines a more concrete mechanism and the borrowing of adverbs, which secondarily become adpositions.

### 5.3. From adverbs and clitics to borrowed adpositions

The borrowing of adverbs as free words that after reanalysis have become adpositions is found in many Western Uralic languages. The similarity of the basic word order between Western Uralic and the neighboring Indo-European languages connects, in principle, the verb phrase of Western Uralic languages with a typologically parallel system. However, this is only a small part of the story, because, in general, phrasal adverbials widely display inflectional morphology in the Uralic languages allowing them to alternate relatively freely with respect to word order depending on the topical structure of the sentence (Vilkuna 1998). Furthermore, phrasal adverbial units such as adpositional phrases display their own morphosyntactic rules that are beyond basic word order patterns. Different manifestations of word order may affect the topical structure of the clause but only rarely influence the mutual hierarchy between individual constituents.

Characteristically, adverbs are not subordinated to productive morphological rules but are used as individual entities and discourse particles, i.e., lexical units that function as free words at the phrasal level. Conceivably, the borrowing of adverbs is fairly common in different language contact situations. In a language contact situation between Western Uralic and Indo-European, adverbs are more susceptible to being borrowed from one language to another than bound morphemes, because they are treated as individual words and not as parts of grammatical structures. However, the number of adpositions originating from borrowed adverbs is not high, either.

For example, Livonian, currently extinct as a community language, uses the Latvian preposition *pa* 'to (become something)' in dynamic predicative adverbial constructions. The complement of the preposition is in the instrumental case (29–30). Historically, the instrumental suffix corresponds to the translative of other Finnic languages and Mordvinic, and indexes the dynamic predicative adverbial and the change in the state of the nominal constituent that is higher in the clause hierarchy, such as the subject or object (Grünthal 2003: 177–188, Turunen 2011). The use of the preposition *pa* in this context is common but not completely obligatory as it can be occasionally omitted (31–32). The instrumental case, in turn, is not optional because

the nominative, for instance, does not imply the binding and systematic case government between the two constituents. In (33), *pa* must be interpreted as an adverb and not the head of an AdpP, because it precedes an uninflected adjective.

Livonian

- (29) *se izā um tie-nd tānda pa rištīngō-ks*  
 it father is make-PTCP.PST him/her to man-INS  
 ‘the father has made him a human being again’ (MSFOu 106: 117)

- (30) *ni se puoga lā-nd... pa kōṛapaintō-ks.*  
 so it boy go-PTCP.PST to herder-INS  
 ‘So the boy has gone to become a herder.’ (MSFOu 106: 63)

- (31) *sie-dā kukīs-t nutā-b (pa) kārmižō-ks*  
 it-PTV insect-PTV call-3SG (to) fly-INS  
 ‘This insect is called a fly.’ (Kettunen 1938: 269)

- (32) *ne vōl-tō ka ne seļlis-t līvō-d,*  
 they be.PST-3PL too they such-PL Livonian-PL  
*kes te-i-tō sie kulturtīe vāggi lālamō-ks*  
 who do-PST-3PL it culture.work very difficult-INS

‘There were also such Livonians who made the cultural work very difficult.’ (PD 1971)

- (33) *perīnaiz tidārō-n jālga um pa sūṛ*  
 housewife.GEN daughter-DAT foot is about big  
 ‘the foot of the housewife’s daughter is too big’ (Mägiste 1964: 64)

In Veps, the easternmost Finnic language and strongly influenced by Russian during the past centuries, code-switching is very frequent, as illustrated above (20, 24). The influence of language contact is seen on all levels of language and choice of language in everyday speech situations. However, there are practically no adpositions of Russian origin. Occasionally, the adverb *ažno* ‘instead (of)’ is used and may occur in a position that is comparable with that of native Veps adpositions. This, too, is an exception to the rule because the syntactic context of *ažno* ‘instead (of)’ considerably diverges from the canonical AdpP in Veps. The main difference is that, if *ažno* ‘instead (of)’ is interpreted as an adposition, the complement should regularly display one of the cases typical of AdpPs. As seen in (34–37), this assumption does not hold. In (34), the position of *ažno* formally corresponds to a postposition following the NP, which instead of the assumed genitive case of the complement displays the unmarked nominative *van’a durak* ‘Ivan stupid’. In (35), the constituent order of the construction *ažno t’utar* corresponds to a PreP, but it diverges from the canonical Veps PreP,

because the assumed complement *t'utar* is in the nominative instead of the assumed partitive *t'utar-t* 'daughter-PTV'. Finally, in (36–37), *ažno* does not have any complement and lacks any personal reference that native Veps postpositions have in contexts where the complement is not overtly manifested. The next constituent, *ühted*, in (36), could be glossed as 'one-PL' or alternatively 'one-PTV,' and *pän*, in (37), formally corresponds to a complement of an AdpP, but both are actually determinants of other arguments.

Veps

- (34) *papad'*      *heregan-z'*      *daa*      *likää-ž*      *jog-he,*      *duma-ii*  
 priest.wife      wake-3SG.PST      and      push-3SG.PST      river-ILL      think-3SG.PST  
*van'a*      *durako-n,*      *a*      *van'a*      *durak*      *ažno*      *papi-n*  
 Ivan      stupid-GEN      but      Ivan      stupid      instead      priest-GEN

'The priest's wife woke up and thought that she will push the stupid Ivan to the river but instead of Ivan she pushed the priest.' (MSFOu 70: 10, MSFOu 86: 538)

- (35) *kacu-hta-b*      *runduga-le.*      *ažno*      *t'utar*      *tukuiž-he*  
 look-MOM-3SG      hatch-ALL      instead      daughter      wad-ILL  
*sido-tu-d*      *ühte-d*      *luhude-d*  
 bind-PTCP.PST-PL      one-PL      bone-PL

'She watches at the hatch. Instead of the daughter, the bones are bound together.' (MSFOu 70: 52)

- (36) *t'utar-t*      *vastta-m-ha*      *tul-i*      *korja-nnost,*  
 daughter-PTV      meet-INF-ILL      come-3SG.PST      sledge-APPR  
*ažno*      *ühte-d*      *luhude-d*      *kogoiže-s*  
 instead      one-PL      bone-PL      pile-INE

'She came to meet the daughter in the sledge. Instead there were only bones in a pile.' (MSFOu 70: 52)

- (37) *nor-ide-n*      *čom-ide-n*      *neičč-ide-n*      *da*      *priho-ide-n*  
 young-PL-GEN      beautiful-PL-GEN      girl-PL-GEN      and      boy-PL-GEN  
*karg*      *noidustel-i*      *kucu-i*      *karg-hu,*      *ažno*  
 dance      persuade-PST.3SG      invite-3SG.PST      dance-ILL      instead  
*pä-n*      *pöru-i*      *heide-n*      *likundo-i-špäi.*  
 head-GEN      feel.fuzzy-3SG.PST      they-GEN      moving-PL-ELA

'The dance of young and beautiful girls and boys persuaded to dance, however, the head was spinning from their moving.' (Kodima 07/2008)

The high degree of variation shows that instead of a head of an AdpP, the word *ažno* actually acts like an adverb and not as a part of a phrasal unit.

#### 5.4. Breaking the barrier in bilingual speech

So far, we have examined constraints that decrease or even prevent the borrowing of adpositions in the Finnic languages. Likewise, it is also difficult to find unambiguous examples of borrowed adpositions in other Western Uralic languages, such as Erzya, one of the two Mordvinic languages. The contemporary language situation is characterized by extensive bilingualism. The following examples were recorded during a fieldtrip to Erzya villages in August 2013. The adoption of Russian *krugom* ‘around’ demonstrates that actually there are some foreign words that have intruded into the Erzya adposition system and into the speech of bilingual speakers of different ages. Semantically, *krugom* is a synonym of Erzya *per’ka* ‘around’, an endogenous word that historically is bimorphemic and consists of the stem and the prolativ ending *per’-ka* (38a). This same suffix also can be attached to *krugom*, as in *krugomka* (38d). The identical morphosyntax with AdpPs displaying either *per’ka* ‘around’ or *krugom* ‘id.’ and a complement in the genitive, e.g., *čuvto-n’-t’* and *ošo-n’-t’* (38a–d), is another important precondition for the classification of *krugom* as an adposition.

Erzya

- (38a) *t’ejt’er’*      *jak-i*      *čuvto-n’*      *per’ka*  
 girl      walk-3SG      tree-GEN      around  
 ‘A girl walks around a tree.’ (Fieldwork 2013)

- (38b) *t’ejt’er’*      *jak-i*      *čuvto-n’*      *krugom*  
 girl      walk-3SG      tree-GEN      around  
 ‘A girl walks around a tree.’ (Fieldwork 2013)

- (38c) *t’ejt’er’e-s’*      *jak-s’-i*      *čuvto-n’-t’*      *krugom*  
 girl-DEF      walk-FREQ-3SG      tree-GEN-DEF      around  
 ‘The girl walks around the tree.’ (Fieldwork 2013)

- (38d) *pir’avkse-s’*      *ašt-i*      *ošo-n’-t’*      *krugomka*  
 fence-DEF      stay-3SG      town-GEN-DEF      around  
 ‘The fence is located around the town.’ (Fieldwork 2013)

The application of *krugom* ‘around’ in Erzya is not limited to contemporary Erzya-Russian bilingual communities but has a longer history. The largest dictionary of Mordvinic based on the extensive fieldwork materials of Heikki Paasonen collected at the end of the 19th and in the early 20th century, for instance, labels *krugom* both as an adverb and a postposition that has a genitive complement (MdWb 896). The same

semantic characteristics of *krugom* as an adverb and a postposition are mentioned in the Erzya-Russian dictionary, as well (ÈRV 305).

In contemporary vernacular Erzya speech, *krugom* may occasionally occur in the position of a preposition preceding its complement as in (39). This, however, was attested only once by the author of this paper during a field trip in the summer of 2013. It was recorded in a situation, in which the informant was extremely enthusiastic about the test and presented a syntactically elliptic comment. Thus, the apparent word order change and exceptional constituent order that (39) yields is a unique example that should rather be interpreted as a slip of tongue than evidence of language change.

- (39) *krugom*      *lis'ma-n'-t'*,      *holodiln'ika-n'-t'*  
 around      well-GEN-DEF      refrigerator-GEN-DEF  
 'around the well, the refrigerator' (Fieldwork 2013)

Considering the contact between Russian and various Western Uralic languages, it is interesting to note that the same Russian adverb and adposition *krugom* is occasionally attested as a preposition in Southern Veps, which is spoken in an entirely different geographical area. In (40), the AdpP *krugom vodet* 'through (around) the year' fully corresponds to the morphosyntactic structure of any other PreP in Veps, because the preposition is frequently uninflected and the complement is in the partitive.

Veps

- (40) *krugom*      *vode-t*      *t'ego-bad*      *voi-n*  
 around      year-PTV      make-3PL      butter-GEN  
 'Throughout the year they make butter.' (MSFOu 86: 538)

However, this pattern is based on the semantics of the Russian adverb *krugom* and the morphosyntax of Veps PreP also is not regular. A more frequent AdpP that has exactly the same meaning contains the preposition *ümbri* 'around' and is attested in all Veps varieties. As demonstrated in section 5.1., the most frequent and almost sole context in which Russian prepositions are applied in Western Uralic without any constraints is code-switching. In the present case, an alternative explanation is that *krugom* is actually a lexical translation of Veps *ümbri*, a lexical unit instead of a phrasal one, and a rare example of adposition borrowing.

## 6. Conclusions

The morphosyntactic diversity of the adpositional phrase in the Uralic languages demonstrates that Uralic adpositions form a lexically and morphosyntactically dynamic subsystem that is open to various diachronic changes, as is language in general. The Western Uralic languages, consisting of Saamic, Finnic, and Mordvinic, have a more ambiguous adpositional system than Uralic languages have on average. However, there

is hardly any indication in the lexicon and the typology of the adpositional phrases that the system has been influenced by language contact. The emergence of prepositions alongside postpositions, for instance, results from endogenous language change rather than from the adoption of loanwords. As a matter of fact, the adpositional systems of individual languages such as Livonian, Veps, and Erzya Mordvin that are strongly influenced by neighboring Indo-European languages, such as Latvian and Russian (Balto-Slavic), resist interference in the domain of adpositional phrases. The typological difference between the Western Uralic and Balto-Slavic languages and the dissimilarity of morphological rules, most notably case inflection, are a major reason for the lack of transparent contact-induced changes in the adpositional systems.

The morphosyntax and grammatical rules characteristic of Western Uralic AdpPs are a short answer to the question of why the borrowing of adpositions in these particular languages does not take place easily. The borrowing of adpositions diverges from the borrowing of words as lexical units, because grammar is multiply involved in their syntax. They typically have a case government that allows for only few alternations with especially postpositions often inflecting in local cases like nouns.

A more detailed list of typological constraints on contact-induced change in Western Uralic languages discussed in this article includes divergence in word order, different case government in adpositional phrases, dissimilarity of case inflection, the importance of flexive and word-based morphology in Balto-Slavic languages, lack of grammatical gender in Uralic, the inflection of postpositions in Uralic, the syntactic endocentrism of postpositions in Uralic, and the general dominance of postpositional phrases over prepositional phrases in Finnic and Saamic. This contrast is important in a longer historical perspective, too, because the contacts between Western Uralic and Indo-European began already in prehistory. However, those contacts did not induce any major changes in the adpositional system.

Nevertheless, there is some evidence of language contacts in the AdpPs of the three languages discussed in more detail: Livonian, Veps, and Erzya. In addition to code-switching, which is the most common way of using donor-language elements in adpositional phrases, there are two main strategies for adopting adpositions originating from another language. First, borrowed body part nouns are occasionally used as relational nouns and as such share the characteristics of postpositions, as non-borrowed body part nouns do. Second, adverbs are often borrowed from various Indo-European and Turkic contact languages into Uralic languages. Like other free morphemes, they may become bound units as adverbials, which at a second stage are perceived as more grammatical units. In both cases, the integration of the borrowed element in the adpositional system takes place via a syntactic reanalysis.

The identification of constraints that decrease the possibility of borrowing adpositions between typologically different languages suggests that the borrowing of adpositions from a typologically similar language is more likely, though not discussed here in more detail. With regard to the development of AdpPs in individual Uralic languages, further evidence should be sought in contacts between languages that are typologically similar or genetically related.



## Abbreviations

ABE	abessive	INF	infinitive
ABL	ablative	INS	instrumental
ACC	accusative	LAT	lative
ADE	adessive	LOC	locative
ADJ	adjectivizer	MOM	momentative
ADV	adverbializer	N	neuter
AdpP	adpositional phrase	N	noun phrase
ALL	allative	NEG	negative
APPR	approximative	ORD	ordinal
CAUS	causative	PASS	passive
CNG	connegative	PL	plural
COM	comitative	PostP	postpositional phrase
CX	case suffix	PreP	prepositional phrase
DAT	dative	PREPL	prepositional
DEF	definite	PROL	prolative
DU	dual	PST	past tense
ELA	elative	PTCP	participle
ENCL	enclitic	PTV	partitive
ESS	essive	PX	possessive suffix
GEN	genitive	REFL	reflexive
ILL	illative	SG	singular
INE	inessive		

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